

REMARKS

At the outset, the Examiner is thanked for the review and consideration of the pending application. The Final Office Action dated April 3, 2008 has been received and its contents reviewed.

Entry of this Amendment is respectfully requested.

1. Amendments and Support for Same.

By this Response, claim 15 has been amended. Support for the amendments to claim 15 can be found at least at Applicant's Figure 5A, Specification page 18, lines 26-27, page 19, lines 1-3, page 23, lines 24-27, page 24, lines 1-7, page 39, lines 14-15 and page 44, lines 17-19. Support for the amendments to claim 15 can further be found at Applicant's Figures 11A through 11H. No new matter is added. Claims 1-14 have previously been canceled. Claim 35 is newly added. Support for new claim 35 can be found at least at Applicant's Specification page 22, lines 1-6. No new matter is added.

Claims 26-31 are not examined per Applicant's election of Group I claims 15-25 readable thereon in the Response to Requirement for Restriction of October 23, 2006.

Accordingly, claims 15-25 and 32-35 are currently pending.

2. Allowable Subject Matter.

Applicant thanks the Examiner for the indication of allowable subject matter regarding claims 33 and 34.

3. Claims 15-25 and 32-34 are rejected under 35 U.S.C. §112(2) as indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Although Applicant disagrees with the Examiner and believes that claim 15 as originally filed is clear and definite, Applicant amends claim 15 to further clarify inventive features therein. Withdrawal of the rejection of claims 15-25 and 32-34 as indefinite is courteously requested.

4. Claims 15 and 24-25 are rejected under 35 U.S.C. §103(a) as unpatentable over United States patent 6,991,934 B2 (*Walton*).

The rejection of claims 15 and 24-25 is respectfully traversed and reconsideration is requested. Claims 15 and 24-25 are allowable over *Walton* in that each of these claims recite a combination of elements including, for example, "... a rotor provided between the substrate holder and a side wall of the vessel, rotatably mounted for rotation around the substrate holder, rotating independently from the substrate holder, and having a vent hole or

vent notch; and a rotary drive for rotating the rotor, thereby alternately bringing the vent hole or vent notch into communication with a gas discharge port for discharge of a reactive gas onto a substrate supported by the substrate holder and after discharge of the reactive gas closing the gas discharge port upon rotation of the rotor.” It is submitted that *Walton* does not teach or disclose at least these features of the claimed invention.

It should first be noted that *Walton* is drawn to a tissue processor for processing biological tissue via a processing chamber having fluid ports as opposed to gas ports. Accordingly, at least because of this significant difference alone between *Walton* and the claimed invention, *Walton* cannot teach the claimed gas ports.

In rejecting claim 15, the Examiner equates *Walton*’s Figure 7 disc (22) with that of the claimed rotor and *Walton*’s agitator (32) with that of the claimed substrate holder. Upon careful study of *Walton*’s Figure 7 and related text, it appears as if the disc (or rotor) and the agitator are very different from the claimed invention and thus function very differently from the claimed invention.

As shown in *Walton*’s Figure 8 which, as best understood by Applicant, seems to be a further detail of Figure 6, the agitator (32) is provided with prongs (33) projecting upwardly from the upper surface of the flat disc and above the upper surface of the disc (22) to engage a basket containing biological specimens and to rotate the disc (22) in connection with the agitator (32). *The disc appears to be rotated in connection with the agitator.* Rotating the disc and agitator with respect to each other is critical in the context of preparing biological specimens. In this way, specimens are moved through a treatment liquid as opposed to the force of the treatment liquid moving past the basket and hence past the specimens (*See, e.g.,* Col. 2, Lines 55-67 and Col. 3, Lines 1-35).

However, the present invention is not concerned with the preparation of biological specimens and thus the present invention functions very differently from that of *Walton*. In the claimed invention, as can be seen by way of non-limiting example in Applicant’s Figure 5A and related text, the substrate holder (4) is supported by a supporting shaft (4a) and the substrate holder is thus rotated upon the supporting axis (corresponding to the supporting shaft 4a) as the rotating axis. As can be seen in Figure 5A, permanent magnets (19a and 19b), strategically located, aid in the rotation of the rotor. A relative position of the rotor with respect to the outer permanent magnets is fixed by a repulsive force acting between the outer permanent magnets provided on the periphery of the reduced pressure vessel and the inner permanent magnets (Specification pages 23-24, lines 24-27 and 1-7, respectively). Rotor and

substrate holder have different drive mechanisms and thus move independently of each other. Stated differently, the present invention does not have a mechanism such as rotating the rotor in connection with the substrate holder. Instead, the present invention has a mechanism capable of rotating the rotor independently from the substrate holder.

Accordingly, it is submitted that the invention of *Walton* is very different from the claimed invention in many significant ways.

It is also submitted that the claimed invention is not rendered obvious by *Walton* because the claimed invention has a completely different function from that of *Walton*.

Accordingly, claims 15 and 21-24 are believed to be allowable over *Walton*.

Withdrawal of the rejection of claims 15 and 21-24 is respectfully requested.

5. Claims 16 and 17 are rejected under 35 U.S.C. §103(a) as unpatentable over Walton in view of United States patent application 2003/0079686 A1 (Chen).

The rejection of claims 16 and 17 is respectfully traversed and reconsideration is requested. Claims 16 and 17 depend from claim 15 and thus necessarily contain all of the limitations of claim 15.

Furthermore, *Chen* is drawn to a gas delivery apparatus and method for atomic layer deposition. As previously noted, *Walton* is drawn to tissue processing. MPEP §2143.01 states in part, the prior art must suggest the desirability of the claimed invention. It would not be desirable to modify *Walton* in view of *Chen* or to modify *Chen* in view of *Walton* because they are drawn to radically different technologies and processes. Introduction of reactive gases and other gases to tissue preparation in the context of *Walton* would likely render *Walton* unfit for its use. Accordingly, there is no desirability to modify the references.

Accordingly, claims 16 and 17 are believed to be allowable over any combination of *Walton* and *Chen*. Withdrawal of the rejection of claims 16 and 17 is respectfully requested.

6. Claims 18-20, 25 and 32 are rejected under 35 U.S.C. §103(a) as unpatentable over Walton in view of United States patent 6,288,465 (Suzuki).

The rejection of claims 18-20, 25 and 32 is respectfully traversed and reconsideration is requested. Claims 18-20, 25 and 32 depend either directly or indirectly from claim 15 and thus necessarily contain all of the limitations of claim 15.

Furthermore, in *Suzuki* Figure 19, at least an air conduit (48a) is next to a bearing rotor (41a) and orifices (48) surround the bearing rotor (41a). It is respectfully submitted that to modify *Walton* in view of *Suzuki* simply would not work. *Walton* requires a seal in the

context of the disc and agitator. Open spaces in *Walton* would disrupt the ability to effectively separate the biological specimens in *Walton* thus rendering *Walton* inoperable.

Accordingly, claims 18-20, 25 and 32 are believed to be allowable over any combination of *Walton* and *Suzuki*. Withdrawal of the rejection of claims 18-20, 25 and 32 is respectfully requested.

7. Conclusion.

As a result of the amendment to the claims, and further in view of the foregoing remarks, it is respectfully submitted that the application is in condition for allowance. Accordingly, it is respectfully requested that every pending claim in the present application be allowed and the application be passed to issue.

If any issues remain that may be resolved by a telephone or facsimile communication with the Applicant's attorney, the Examiner is invited to contact the undersigned at the numbers shown below.

Respectfully submitted,

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July 1, 2008

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